

Work Order ID 135984

Wednesday, August 26, 2015

Page 1

Item ID: _____ Revision ID: _____
Item Name: _____
Draw Nbr: _____ Start Date: 8/26/2015 1:5 Start Qty: 1.0000
Revision Nbr: _____ Required Date: 8/28/2015 Reqd Qty: 1.0000
Reference: ECN 15-617 Cust Item ID: _____ Customer ID: _____
Description: UPDATE PAPERWORK PER ECN 15-617: ADD STC TO ALL D119-646-XXX IN STOCK Sales Order: _____

Approvals: Process Plan: MF Date: 15-8-28 Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID	Work Center ID	Operation Description	Hours		Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
			Set Up	Run							

DAS
6
9-89

MF
AUG 28 2015

MF
15-8-28

QC 21- 15/6/1 AG

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
OTHER : _____									

List Lots

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Wednesday, August 26, 2015 1:55:31 PM

Criteria : Item ID: 'D119-646-041', 'D119-646-114', 'D119-646-143', 'D119-646-211', 'D119-646-212', 'D119-646-213', 'D119-646-214', 'D119-646-241', 'D119-646-243', 'D119-646-243RevB', 'D119-646-251', 'D119-646-311', 'D119-646-451', 'D119-646-452' All Locations All Warehouses All Quantity

Item ID Item Name	Warehouse ID Location ID	Lot Number	Last Trans Date	Lot Qty	Shelf Life Dt	Lot Code	Type Code	Comments
D119-646-114 Skidtube RH with Wearplates & Wearpads, DART (Apical) Tri-Bag Float Compatible	OFFSHORE FG	129388	4/20/2015	1.0000		QC21	CHG004	
Total:				1.0000				
D119-646-143 Repl. Skidtube with Wearplates & Wearpads,DART(Apical) Tri-Bag Float Comp. LH/RH	OFFSHORE FG	129468	4/20/2015	1.0000		QC21	CHG004	
Total:				1.0000				
D119-646-211 Skidtube LH with Run-on Landing Wearplates	Main Warehouse FG084	117257 ✓	6/8/2015	1.0000		QC21	chg004	
	Main Warehouse FG084	117258 ✓	6/8/2015	1.0000		QC21	CHG004	
	Main Warehouse FG084	129041 ✓	6/4/2015	1.0000		QC21	CHG004	
	Main Warehouse FG084	133010 ✓	6/4/2015	1.0000		QC21	CHG004	
	Main Warehouse FG084	133011 ✓	6/4/2015	1.0000		QC21	CHG004	
Total:				5.0000				
D119-646-212 Skidtube RH with Run-on Landing Wearplates	Main Warehouse FG084	124435 ✓	6/16/2015	1.0000 ✓		QC21	CHG004	
	Main Warehouse FG084	129042	6/16/2015	1.0000 ✓		QC21	CHG004	

DAS
6
9-89

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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Skid-tube ☐ Cross tube ☐ Water Jet ☐ Engineering ☐ Scrap ☐ Machining ☐ Small Fab ☐ Prod. Eng. Coord. ☐ Quality ☐ Use-as-is ☐ Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

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Item ID Item Name	Warehouse ID Location ID	Lot Number	Last Trans Date	Lot Qty	Shelf Life Dt	Lot Code	Type Code	Comments
D119-646-212 Skidtube RH with Run-on Landing Wearplates	Main Warehouse FG084	129043	6/16/2015	1.0000 ✓		QC21	CHG004	
	Main Warehouse FG084	129044	6/16/2015	1.0000 ✓		QC21	CHG004	
	Main Warehouse FG084	129045	6/16/2015	1.0000 ✓		QC21	CHG004	
Total:				5.0000				
D119-646-213 Skidtube LH with Run-on Landing Wearplates, DART(Apical) Tri-Bag Float Comp.	OFFSHORE FG	112714	7/30/2015	1.0000		QC21	CHG005	
Total:				1.0000				
D119-646-214 Skidtube RH with Run-on Landing Wearplates, DART (Apical) Tri-Bag Float Comp.	OFFSHORE FG	102698	6/26/2015	1.0000		QC21	CHG005	
	OFFSHORE FG	112715	7/30/2015	1.0000		QC21	CHG005	
Total:				2.0000				
D119-646-241 Replacement Skidtube with Run-on Landing Wearplates, Fits LH or RH	Main Warehouse FG084	118472 ✓	6/23/2015	1.0000		QC21	CHG003	
	Main Warehouse FG084	118477 ✓	6/23/2015	1.0000		QC21	CHG003	
	Main Warehouse FG084	118478 ✓	6/23/2015	1.0000		QC21	CHG003	

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Date : _____	Step #: _____	QTY Effective : _____		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

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Item ID Item Name	Warehouse ID Location ID	Lot Number	Last Trans Date	Lot Qty	Shelf Life Dt	Lot Code	Type Code	Comments
D119-646-241 Replacement Skidtube with Run-on Landing Wearplates, Fits LH or RH	Main Warehouse FG084	118479 ✓	6/23/2015	1.0000		QC21	CHG003	
			Total:	4.0000				
D119-646-243 Repl. Skidtube with Run-on Landing Wearplates, DART (Apical) Tri-Bag Float Comp.	OFFSHORE FG	129394 ✓	6/17/2015	1.0000		QC21	CHG004	
			Total:	1.0000				
D119-646-251 Run-on Landing Wearplate, Fits LH or RH	Main Warehouse FG128b	118389 ✓	12/19/2014	2.0000		QC21	CHG002	
			Total:	2.0000				
D119-646-311 Ground Handling	Main Warehouse PK013	130012 ✓	6/12/2015	4.0000		QC21	CHG001	
	Main Warehouse PK013	130013 ✓	6/12/2015	2.0000		QC21	CHG001	
			Total:	6.0000				
D119-646-451 OEM Replacement Wearplate & Wearpad LH	Main Warehouse FG034	62539 ✓	6/30/2014	1.0000		QC21	CHG001	
			Total:	1.0000				
D119-646-452 OEM Replacement Wearplate & Wearpad RH	Main Warehouse FG034	62540 ✓	6/30/2014	1.0000		QC21	CHG001	
			Total:	1.0000				

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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
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Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition			Completed By																		
Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER :																			

ENGINEERING CHANGE NOTICE

DART AEROSPACE LTD

Date: 15.08.24	Job No.:	ADR Yes/No: N	ADR Date:	ECN #: 15- 617
Product No.: D119-646		Created By: KJ	Approved By: <i>[Signature]</i>	
Product Name: Skidtubes		Checked By:		

Distribution	Reqd	Resp	Initial / Date (YY/MM/DD)	Distribution	Reqd	Resp	Initial / Date (YY/MM/DD)
Director of Operations	Y	NF		DQA / QA Coord.	Y	PS / ED	
Production Manager / Coord.	Y	MP / MF		QC Coordinator	Y	PD	
Purchasing Coord.	N	LL / CL		Customer Support	Y	SW / LM	
Production Engineering Coord.	N	DD / JLM		Customer Technical Support	Y	MB / HS	
Production Engineering Coord.	N	DL		Marketing	Y	SL / WR	
Customer Order Processing	N	SL / BG		Sales Support Manager	Y	CP	

Reason for Change:
New ANAC STC

Documents Affected:
Release ANAC STC: 2015S08-04 dated 15.08.12

IF APPLICABLE: NCR: PAR: CAR: CIR: URF:

PAPERWORK UPDATE ☒ PARTS MUST COMPLY ☐ PREVIOUS PARTS SATISFACTORY ☐

#	Quality Assurance Actions	Reqd	Resp	Notes	Complete
1	Notify Previous Customers	N			
2	Notify Eurocopter France	N			
3	Notify Augusta Westland	N			
4	Manufacturing Licensing Agreement Update	N			

#	Engineering Actions	Reqd	Resp	Notes	Complete
5	Required Documents/Drawings/Item ID's Under Review (URF)	N			
6	Update Master Document List (MDL)	N			
7	Update Document Record (DR)	N			
8	Update Product Compatability Matrix	N			
9	Notify TC / FAA of Change (eg. ICA, 8110-3)	N			
10					

#	Document Control Actions	Reqd	Resp	Notes	Complete
11	Move / Update Electronic Files / Design Journal	N			
12	Update Product Specification Files (Bluefiles)	Y	KJ	See Below	15.08.24 <i>[Signature]</i>
13	Update Approved/Preliminary Dwg PDF Files	N			
14	Update Product Development Summary (STC applications)	Y	KJ		15.08.24 <i>[Signature]</i>
15	Update QSI 021 (TC/FAA STC) and/or STC Approval List	Y	KJ		15.08.24 <i>[Signature]</i>
16	Create/Update Parts / STC Database	Y	KJ		15.08.24 <i>[Signature]</i>
17	Update / Verify Airworthiness Release Certificate Database	N			
18	Create / Update Change Record Form / Item Card Database	N			
19	Create / Update Packaging Process Plan (PPP)	N			
20	Red Decals required on Packaging Process Plan (PPP)?	N			
21	Update Controlled Supplier Documents (Qpulse) Database	N			
22	Update Grey Project Binder / Electronic Project Folder	Y	KJ		15.08.24 <i>[Signature]</i>
23	Update D-Part / M-Drawing / DSI / DEO Master Binders	N			
24	Update "Royalty Paid to" attribute (Parts sold under Dart USA STC's)	N			
25					

Description / Action:

Please update paperwork in stock and in progress with this STC

D119-646-211-5
212-5
241-4
251-2
311-6
451-1
452-1

#135984

off shore
213 - 1
214 - 2
243 - 1

ECN Verified & Complete: _____ Date: _____

DQA: _____ Date: _____



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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
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Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
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